20010216.ba v03_n104.bam.20010216

>From ???@??? Fri Feb 16 17:08:59 2001 -0600
Date: Fri, 16 Feb 2001 17:06:28 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3104
Message-Id: <20010217001425.4570C3560@devel43.theporch.com>

BOATANCHORS Digest 3104

Topics covered in this issue include:

1) Inrush limiters
   by Avery Comarow <acomarow@usnews.com>
2) Dynamotor whine
   by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
3) Re: Inrush limiters
   by Avery Comarow <acomarow@usnews.com>
4) Paper anchors
   by "Rhett T. George" <rtg@ee.duke.edu>
5) Silvertone 5656-A
   by Merz Donald S <merz.ds@mellon.com>
6) Boatanchor haunts in Fl
   by Bill Weinel <tuberadio@mindspring.com>
7) Acorn, anyone?
   by Arden Allen <gumbear@pacbell.net>
8) Heath IF filter sought. 3395kc 400c from HW or SB series. Pay $25 or Swap SS VHF RX
   by "Bob Duckworth" <wb4mnf@atl.org>
9) Forwarding query on cabinet color of RME-70
   by Richard Post <post@ouvaxa.cats.ohiou.edu>
10) Question on Panadaptor PCA T-200 (SP-44)
   by Richard Post <post@ouvaxa.cats.ohiou.edu>
11) Re: Question on Panadaptor PCA T-200 (SP-44)
   by W7QHO@aol.com
12) Re: National FB7A receiver
   by James Hanlon <knjhanlon@qwest.net>
13) Re: National FB7A receiver
   by "Mike B. Feher" <n4fs@monmouth.com>
14) Re: Inrush limiters
   by Arden Allen <gumbear@pacbell.net>
15) Spy set acc FS
   by BEN NOCK <G4BXD@compuserve.com>
16) RE: Q re: inrush limiter
   by Avery Comarow <acomarow@usnews.com>
17) Re: National FB7A receiver
   by James Hanlon <knjhanlon@qwest.net>

Message-Id: <4.2.2.20010216085112.00a9bcb0@ntpop.usnews.com>
Date: Fri, 16 Feb 2001 08:58:51 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Avery Comarow <acomarow@usnews.com>
Subject: Inrush limiters
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Installing inrush limiters on old gear sounds like a no-brainer (although the fact that I haven't yet done it defines me as having no brain). But I have a question: how do you choose the right one?

Say your boatanchor draws about 2A. Checking the specs on the Amatherm Web site (thanks to Ed Sieb for posting the URL) shows cold resistances ranging from 20 to 220 ohms for that current. Other current draws show similarly wide ranges. Is there a rule of thumb about the one to use?

Also, the limiters come in a variety of sizes--which I assume relates to power dissipation. Does size matter (no vulgar jokes!) as long as a limiter has an adequate current rating?

73, Avery W3AVE

Message-Id: <3.0.1.32.20010216091618.0104aa30@vuse.vanderbilt.edu>
Date: Fri, 16 Feb 2001 09:16:18 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>
Subject: Dynamotor whine
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

BC-348K seeks DM28 dynamotor assembly.

Object: Matrimony.

There is something of a dowry, I can throw in a brand new, wrapped in the wax paper Westinghouse 1171187A unit (27 v/1.4 A in, 285v/60 mA out) to sweeten the deal. This is a two-wire (common ground) dynamotor, but is easily converted to four wire in a few minutes. It's a little bit hot for the 348, and I'd like to get the 348 filter stuff as well.
                   73   A. B. Bonds

Message-Id: <4.2.2.20010216111843.00a96620@ntpop.usnews.com>
Date: Fri, 16 Feb 2001 11:21:44 -0500

To: Old Tube Radios <boatanchors@theporch.com>
From: Avery Comarow <acomarow@usnews.com>
Subject: Re: Inrush limiters
Cc: boatanchors@theporch.com
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Greetings, Jim--

Thanks for the tutorial. I wonder why Amatherm doesn't post hot resistance at its Web site.

73, Avery W3AVE

At 11:11 AM 2/16/2001 -0500, you wrote:
>Hi Avery,
>The cold resistance determines the peak inrush current. For instance, if
>you put the 20 ohm device in a boatanchor, and you assume that at turnon
>the entire line voltage is dropped across the device, then the peak current
>would be 120V/20ohms = 6 amperes. As a practical matter, the inrush current
>would be somewhat less than that, depending on the boatanchor, since the
>initial line voltage is never dropped completely across the surge limiter.
>
>I usually look at the hot resistance before making a decision. If the hot
>resistance is, say, 1 ohm, and the steady-state current of the boatanchors
>is 1 Amp (typical for receivers), then you'll drop 1 Volt across the
>limiter after the initial surge, which corresponds to 1 Watt of heat. These
>devices are expected to run rather hot, so that would be a reasonable
>choice. If the hot resistance was, say, 10 ohms, then you'd drop 10Volts
>across the device (after the initial surge), which corresponds to 10 Watts
>of heat. That's too much!
>
>For my boatanchors, I usually measure the peak current with my Fluke 87,
>which has a peak reading feature. I pull the fuse and jumper a 1 ohm
>resistor across the fuse terminals, and then use the Fluke 87 to measure
>the peak voltage across the resistor at turnon. I select the surge limiter
>that reduces the surge current by at least half.
>
>73,
>
>Jim Garland W8ZR
>
>
>
>   At 08:58 AM 2/16/2001 -0500, you wrote:
> >Installing inrush limiters on old gear sounds like a no-brainer (although
> >the fact that I haven't yet done it defines me as having no brain). But I
> >have a question: how do you choose the right one?

> >>
>**********************
>James C. Garland
>Office of the President
>Miami University
>Oxford, OH 45056
>(513) 529-2346
>**********************

From: "Rhett T. George" <rtg@ee.duke.edu>
Date: Fri, 16 Feb 2001 11:56:18 -0500
Message-Id: <200102161656.LAA29760@champ.ee.duke.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Paper anchors

 - Greetings -

This for folks in or near Durham, NC. I have approximately 40 years collection of IEEE/IRE Transactions on Electron Devices, 40 years collection of IEEE/IRE Proceedings, and most of the IEEE Spectrums to give away.

Bring truck.

73   Rhett - KE4HIH

Message-ID: <20010216171347.25882.qmail@mellon.com>
From: Merz Donald S <merz.ds@mellon.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Silvertone 5656-A
Date: Fri, 16 Feb 2001 12:08:16 -0500
MIME-Version: 1.0
Content-Type: text/plain

I picked up a neat old BA receiver on eBay last month. It's a Silvertone 5656A. Luckily, it came with the original manual which has the grandiose title "Silvertone Amateur Communication Receiver Model 5656-A" . The schematic is dated 8/36. The set has a huge 8" circular dial on the left and a fine-sounding 8" speaker on the right. The dial has a neat bezel and convex dial glass similar to the RCA ACR-136. Bandspread is mechanical and tuning works like a clock--the "second hand" is your bandspread and the combined "minute/hour hand" shows where you are in the band. The BFO is built around a metal 6C5 tube. Variable selectivity is provided by an iron-core coil linkage assembly that allows the core to be moved in and out of the coil. It has a 465kc IF and both IF and RF amps use 6K7 metal tubes. The local oscillator is a glass 6C5 tube that is enclosed in a 4-piece metal shield that looks like a coffin. The shield connects to a grounded pin on the base of the tube. The schematic refers to the mixer as a "translator" and the mixer tube is a 6L7 metal type. Detector duties and AVC chores are handled by a 6Q7 metal tube and AF output is provided by a single 6F6. The speaker is a Jensen 8" type with an 1800 ohm field winding.

The set must have had a melt down at some point and a service man has replaced parts of a 6-section voltage divider (an ugly tapped-resistor thing) and the power transformer. He also replaced most of the capacitors. Unfortunately, he did this all in a very haywire fashion and it was quite a mess with long leads soldered to other long leads, electricians-taped joints and so forth. I re-capped the set completely with mylars and rationalized all the wiring. It rewarded my effort by coming right up and playing beautifully. It had one unoriginal 3/8" hole in the front panel which I filled using the epoxy method. It also only had 4 of its original knobs so I am having some castings made to replace the missing ones.

I'm glad to have this unique set in my collection. Has anyone seen any of these elsewhere?

73, Don Merz, N3RHT

****
DISCLAIMER: The information contained in this e-mail may be confidential and is intended solely for the use of the named addressee. Access, copying or re-use of the e-mail or any information contained therein by any other person is not authorized. If you are not the intended recipient please notify us immediately by returning the e-mail to the originator.

From: Bill Weinel <tuberadio@mindspring.com>
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <004f01c0983b$2a9d05c0$7b0748c7@interpath.net>
Subject: Boatanchor haunts in Fl
Date: Fri, 16 Feb 2001 12:09:04 -0500
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings fellow anchorites:

I am anticipating a trip to Miami, Titusville, and St Augustine FL in the not to distant future. Are there any good boatanchor haunts along the way which I should add to my itinerary?

73 de bill, w4whw

Date: Fri, 16 Feb 2001 09:18:57 -0800
From: Arden Allen <gumbear@pacbell.net>
Subject: Acorn, anyone?
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0G8V00FW219KQY@mta6.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Tube Nuts;

I keep stumbling across this odd sized box when digging through one of my boxes of miniature tubes. The box says "Tender Spares, RDZ-1, 1-vacuum tube, 6F4, SYM. No. V-105, 106". They even tell which socket to put it in! It needs a new home, possibly under a green tent or on a grey hulk. It's NIB/NOS, the very best kind. I hope it's what you can use cuz it will cost you shipping ($3.50 Priority).

Arden Allen   KB6NAX   Vallejo, CA   gumbear@pacbell.net

Message-Id: <200102161722.MAA19177@hat-trick.atl.org>
From: "Bob Duckworth" <wb4mnf@atl.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Heath IF filter sought. 3395kc 400c from HW or SB series. Pay $25 or Swap SS VHF RX
Date: Fri, 16 Feb 2001 12:21:08 -0500

Heath IF filter sought. 3395kc 400c from HW or SB series. Pay $25 or Swap SS VHF RX
I want to remove the homebrew 4 pole filter from my HW-16 and try one of the factory filters. How many poles he wonders???. The homebrew has too much leakage even though I've installed shields and tied and grounded all the xtal cases.

Swap:

$25 incl postage

or

A surplus load management RX for VHF, 154Mc IIRC that has 10.7 two pole and

a 455kc, at least 4 pole filters. Fairly narrow band at 455 as it was for low speed date.

Also have lotsa other good parts like dual gate MOSFETs and some useful ICs
Will swap this even. Add a xtal for 2m monitoring, use for remote control
on 2m
use parts to build something else?

Would also like to hear from anyone who has added HB or factory 'improved'
IF filter to
HW-16.

-bob
wb4mnf

Message-Id: <v03007801b6b3137a955b@[132.235.46.182]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Fri, 16 Feb 2001 12:58:55 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Richard Post <post@ouvaxa.cats.ohiou.edu>
Subject: Forwarding query on cabinet color of RME-70

Anchorites,

If you have a color pic of an RME-70, please answer a query from Benito PY2BVF.

His e-mail is -
>From: "BENITO VAZQUEZ" <py2bvf@globo.com>
>Subject: information
>Date: Wed, 14 Feb 2001 16:29:42 -0300
>
>   Dear Rich,   I use your web page as a reference for my
>restorations. I saw a picture of an old rme-69 receiver in there. I have
>an rme-70 and i need a good picture for identify the gabinet colour. Can
>you help me on this? I try several sources and i can't have an answer. If
>you know a person who have this radio, send me an e-mail, if possible.
>Congratulations for your page; it's a very good source of information.
>73's de   Benito Vazquez PY2BVF
>

73 de Rich KB8TAD

Message-Id: <v03007802b6b313ddaca5@[132.235.46.182]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Fri, 16 Feb 2001 12:58:14 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Richard Post <post@ouvaxa.cats.ohiou.edu>

Subject: Question on Panadaptor PCA T-200 (SP-44)

Working on a Panoramic Radio PCA T-200. That's the same as the Hallicrafters SP-44 Panadaptor with different knobs and logo. Great cosmetics but arrived without the transformer or 6X5 rectifiers.

Has anyone replaced the transformer on one of these? According to the voltage chart, the device needs B+ at 380 volts. If someone has the milliamp draw on the B+ that would help. The chart also shows the 2AP1A CRT looking for about -740. I assume the filament on the CRT is 6.3 volts also (with that serious bias on it), but will check that out. Since the 6X5 tubes are already missing, was thinking of using a simple voltage doubler to get the -740 or so.

There is a circuit for replacing the power supply on 400 Hz scopes in an old CQ surplus issue that shows one side of the high-voltage from a regular receiver transformer with a cap in series to pass the AC to silicon diodes in a voltage doubler arrangement. That should work.

But has anyone tried this before? I suppose I could use a spare scope transformer, but space in the panadaptor is an issue. This thing is small.

73,

Rich

Boatanchor Pix website - KB8TAD
<http://oak.cats.ohiou.edu/~postr/bapix/>

Museum of Radio and Technology
<http://oak.cats.ohiou.edu/~postr/MRT>

From: W7QHO@aol.com
Message-ID: <f9.75e3171.27becfc5@aol.com>
Date: Fri, 16 Feb 2001 13:47:33 EST
Subject: Re: Question on Panadaptor PCA T-200 (SP-44)
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

In a message dated 2/16/01 10:00:23 AM, post@ouvaxa.cats.ohiou.edu writes:

>Has anyone replaced the transformer on one of these? According to the
>voltage chart, the device needs B+ at 380 volts. If someone has the
>milliamp draw on the B+ that would help. The chart also shows the 2AP1A

>CRT looking for about -740. I assume the filament on the CRT is 6.3 volts
>also (with that serious bias on it), but will check that out.   Since the
>6X5 tubes are already missing, was thinking of using a simple voltage
>doubler to get the -740 or so.

Rich,

I blew the power transformer in my T-200 back in the 80s. They were apparently a weak point. Replaced it with a unit from my junque box chosen to give the necessary heater voltages and approximately the original B+, and I used a voltage doubler like you mentioned to keep the CRT happy. May have used solid state diodes in the doubler, I just don't remember at this point. Anyway, it's been working FB ever since.

The T-200 is a fairly crude box but gives a useful display on that little 2" tube. I used mine mostly on 10M where the signals tend to be spread out. Nice to be able to keep an eye on the whole AM window. Hard to discriminate between signals on the lower bands, though.

73 es gud luck,

Dennis D. W7QHO
Glendale, CA

Message-ID: <3A8D7C07.826C57DA@qwest.net>
Date: Fri, 16 Feb 2001 12:14:16 -0700
From: James Hanlon <knjhanlon@qwest.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: National FB7A receiver
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Roy,

Congratulations on getting an FB7 in good condition. I continue to be amazed at how well my FB7 works. I'm sure you will enjoy yours.

As to the filament transformer, if you will be using the original power cable on the receiver to connect to your power supply you will want a transformer that delivers about 2.8 volts to the end of the cable. Because of the high, 9 1/2 ampere filament current drain, there is about 0.3 volt drop across the cable. The old National Page ads in QST mentioned this and commented that about half of the complaints with FB-7's were due to low filament voltage.

You should measure the voltage across the heater terminals in the receiver to make sure you get 2.5 volts inside.

National recommended the 5887-AB power supply for the FB-7 which supplies 180 volts B+ and where not more than 1 1/2 watts of audio output is required. For more audio output, they recommended the 5897-AB supply which puts out 240 volts B+ at full load. At 180 volts the receiver draws about 40 ma and varies somewhat with the setting of the volume control.

If you get two offers for 160 meter coil sets, please let me know. I'm also in need of a set. I have coil winding information for 160 and 10 as well if you get desperate.

I don't have a PSK, but I do find that a Hammarlund DB-20 helps as well, especially with the images on 20 meters. I've also added a Heathkit QF-1 Q-multiplier. It helps cut through the QRM on the Classic Exchange. I had no trouble tuning it the the 485 kc IF of the FB-7.

Regarding rebuilding the receiver, my advice is not to do it. My FB-7 has all of its original capacitors and resistors and it is running just fine. The only capacitor that was not working properly was the 10 mfd cathode bypass on the 59 audio output tube. It had lost most of its farads, so I paralleled a small, Japanese capacitor across it and tucked it underneath it so that it wouldn't show.

Let me know if you have any trouble getting your FB7 going.
Maybe we can have a FB-7 2-way QSO when you do.

73,

Jim, W8KGI

Date: Fri, 16 Feb 2001 14:31:24 -0500
From: "Mike B. Feher" <n4fs@monmouth.com>
Subject: Re: National FB7A receiver
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <012b01c0984f$0db0c1e0$20c5be18@n4fs>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 7BIT

The FB-7/FBX is a great receiver. But, without a preselector 160 is essentially useless. At least that has been my experience. I have had about

15 of them and still have 6 or so, as well as extra coils. While I have not participated in the last few AWA CW events, when I did, I used the FB-7 for several years. Again, it was useless on 160 without the preselector. Images were just too strong. 73 - Mike

Mike B. Feher, N4FS
89 Arnold Blvd.
Howell NJ, 07731
(732) 901-9193

----- Original Message -----
From: "James Hanlon" <knjhanlon@qwest.net>
To: "Old Tube Radios" <boatanchors@theporch.com>
Sent: Friday, February 16, 2001 2:14 PM
Subject: Re: National FB7A receiver

> Roy,
>
> Congratulations on getting an FB7 in good condition. I continue to be amazed at how well my FB7 works. I'm sure you will enjoy yours.
>
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>
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>
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> that was not working properly was the 10 mfd cathode bypass
> on the 59 audio output tube. It had lost most of its
> farads, so I paralleled a small, Japanese capacitor across
> it and tucked it underneath it so that it wouldn't show.
>
> Let me know if you have any trouble getting your FB7 going.
> Maybe we can have a FB-7 2-way QSO when you do.
>
> 73,
>
> Jim, W8KGI
>
>

Date: Fri, 16 Feb 2001 10:00:02 -0800
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: Inrush limiters
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0G8V00IIQ34U3C@mta6.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

Hi Avery;

> Installing inrush limiters on old gear sounds like a no-brainer (although

> the fact that I haven't yet done it defines me as having no brain). But I

> have a question: how do you choose the right one?
>
> Say your boatanchor draws about 2A. Checking the specs on the Amatherm
Web
> site (thanks to Ed Sieb for posting the URL) shows cold resistances
ranging
> from 20 to 220 ohms for that current. Other current draws show similarly
> wide ranges. Is there a rule of thumb about the one to use?

>
> Also, the limiters come in a variety of sizes--which I assume relates to
> power dissipation. Does size matter (no vulgar jokes!) as long as a
limiter
> has an adequate current rating?

I went through this exercise some time ago. Upon initially turning on something that starts with a current surge the cold resistance of the NTC thermistor will reduce the surge current to a value depending on the duration of the surge and the time constant of the thermistor. A smaller sized thermistor for a given current rating will heat up faster thus giving a shorter time constant. To be precise you have to determine the right value empirically. The surge time for a typical boatanchor is not very long so a small thermistor is best. Don't use a higher current rating thermistor than what your BA draws because the thermistor won't reach its minimum resistance and your BA may be a bit voltage starved. Take a look at the data sheet for the SL06-16002:

<http://www.ametherm.com/download/SL08%2016002.pdf>

The maximum steady state current is rated at 2.0 amps. The cold resistance is 16 ohms. The hot resistance at *100% of the maximum steady state current* is 0.46 ohms. The thermal time constant is 20 seconds. Therefore is should be understood that it will take about 20 seconds for your BA and the thermistor to reach equilibrium (or a little longer as your tubes warm up). You will lose approximately 1 volt of line voltage when warmed up.

Rigs that employ tube rectifiers have their surge limiters already built in. Rigs that have solid state rectifiers depend on the surge current capability of the diodes for protection. Where you run into problems is with devices that have widely varying current demands such as linear amplifiers. The surge limiter's resistance increases when an amp is idling and then the amp won't produce full power when keyed. A step start surge limiter circuit is a better choice for a linear amplifier. In that case an ordinary power resistor will suffice. To me it says that surge limiters for BA's are an unnecessary frill.

Arden Allen   KB6NAX   Vallejo, CA   gumbear@pacbell.net

Date: Fri, 16 Feb 2001 15:05:33 -0500
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Spy set acc FS
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200102161505_MC2-C5D1-D5A8@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;

```
      charset=ISO-8859-1
Content-Disposition: inline

Miniature AC volmeter, part of the Mk 123 Spy radio kit. =

Used to check on the supply voltage available.

1.25 by 1.25 by 2.5 inch, two flying leads, meter scaled
90 to 260v ac.

20.00 Pound

Ben.

------------------------------
Message-Id: <4.2.2.20010216170741.00a94130@ntpop.usnews.com>
Date: Fri, 16 Feb 2001 17:10:23 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Avery Comarow <acomarow@usnews.com>
Subject: RE: Q re: inrush limiter
Cc: boatanchors@theporch.com
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Michael, thank you, but I'm puzzled by the advice to switch the surge
limiter out of the circuit, since the hot resistance, if chosen correctly,
should keep the voltage drop across the limiter to a very minimal value.

73, Avery W3AVE

At 05:12 PM 2/16/2001 -0500, you wrote:
>Avery,
>     Actually, the higher resistance ones will limit the current more than
>the low resistance ones.  See:
>
>http://www.ametherm.com/inrush_current_limiters_.htm
>
>ideally, you should also provide a means to switch the limiter out of the
>circuit after the initial surge has passed:
>
>http://www.ametherm.com/Inrush_Current_FAQ.html
>
>73, Michael Tracy, KC1SX, ARRL Lab
>
>-----Original Message-----
>From: Avery Comarow [mailto:acomarow@usnews.com]
>Sent: Thursday, February 15, 2001 10:48 AM
>To: doctor@arrl.org
```

>Subject: Q re: inrush limiter
>
>
>I have a number of boatanchors deserving of tender handling, and I've read
>that installing an inrush limiter on each one might be advisable. How do I
>select the right one? The catalogs show more than one device for the same
>current. For example, the Amatherm list shows resistances ranging from 20
>ohms to 220 ohms for inrush limiters with a maximum current of 2A. Is the
>idea to choose the lowest resistance?
>
>Thanks!
>
>73, Avery Comarow W3AVE in Potomac, Md.

Message-ID: <3A8DB284.2F4A5667@qwest.net>
Date: Fri, 16 Feb 2001 16:06:45 -0700
From: James Hanlon <knjhanlon@qwest.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: National FB7A receiver
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Mike,

That's interesting. Of course not having 160 meter coils I can't speak from real experience, but it would seem to me that the images on 160 should not be as bad as they are on the higher frequency bands. They should be from signals 900+ kc above 160, and there aren't that many high power signals up there. Have you peaked the tuning on your detector coil? That might help.

And if you have any extra 160 meter coils, I sure could use a set.

Jim, W8KGI

"Mike B. Feher" wrote:

> The FB-7/FBX is a great receiver. But, without a preselector 160 is
> essentially useless. At least that has been my experience. I have had about
> 15 of them and still have 6 or so, as well as extra coils. While I have not
> participated in the last few AWA CW events, when I did, I used the FB-7 for
> several years. Again, it was useless on 160 without the preselector. Images
> were just too strong. 73 - Mike
>
> Mike B. Feher, N4FS
> 89 Arnold Blvd.
> Howell NJ, 07731

> (732) 901-9193
>
> ----- Original Message -----
> From: "James Hanlon" <knjhanlon@qwest.net>
> To: "Old Tube Radios" <boatanchors@theporch.com>
> Sent: Friday, February 16, 2001 2:14 PM
> Subject: Re: National FB7A receiver
>
> > Roy,
> >
> > Congratulations on getting an FB7 in good condition. I
> > continue to be amazed at how well my FB7 works. I'm sure
> > you will enjoy yours.
> >
> > As to the filament transformer, if you will be using the
> > original power cable on the receiver to connect to your
> > power supply you will want a transformer that delivers about
> > 2.8 volts to the end of the cable. Because of the high, 9
> > 1/2 ampere filament current drain, there is about 0.3 volt
> > drop across the cable. The old National Page ads in QST
> > mentioned this and commented that about half of the
> > complaints with FB-7's were due to low filament voltage.
> > You should measure the voltage across the heater terminals
> > in the receiver to make sure you get 2.5 volts inside.
> >
> > National recommended the 5887-AB power supply for the FB-7
> > which supplies 180 volts B+ and where not more than 1 1/2
> > watts of audio output is required. For more audio output,
> > they recommended the 5897-AB supply which puts out 240 volts
> > B+ at full load. At 180 volts the receiver draws about 40
> > ma and varies somewhat with the setting of the volume
> > control.
> >
> > If you get two offers for 160 meter coil sets, please let me
> > know. I'm also in need of a set. I have coil winding
> > information for 160 and 10 as well if you get desperate.
> >
> > I don't have a PSK, but I do find that a Hammarlund DB-20
> > helps as well, especially with the images on 20 meters.
> > I've also added a Heathkit QF-1 Q-multiplier. It helps cut
> > through the QRM on the Classic Exchange. I had no trouble
> > tuning it the the 485 kc IF of the FB-7.
> >
> > Regarding rebuilding the receiver, my advice is not to do
> > it. My FB-7 has all of its original capacitors and
> > resistors and it is running just fine. The only capacitor
> > that was not working properly was the 10 mfd cathode bypass
> > on the 59 audio output tube. It had lost most of its

> > farads, so I paralleled a small, Japanese capacitor across
> > it and tucked it underneath it so that it wouldn't show.
> >
> > Let me know if you have any trouble getting your FB7 going.
> > Maybe we can have a FB-7 2-way QSO when you do.
> >
> > 73,
> >
> > Jim, W8KGI
> >
> >

End of BOATANCHORS Digest 3104
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